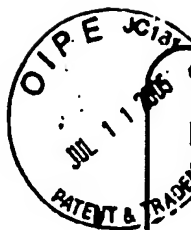


Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0851-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number	10/090,963
Filing Date	March 5, 2002
First Named Inventor	Dennis E. Chapman
Group Art Unit	2161
Examiner Name	Nguyen, Cindy
Attorney Docket Number	112056-0047

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
CN	1	4,570,217		Allen et al.	02-11-1986	
CN	2	5,163,131		Row et al.	11-10-1992	
CN	3	5,202,979		Hillis et al.	04-13-1993	
CN	4	5,278,979		Foster et al.	01-11-1994	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
CN	5	AKYUREK, SEDAT, <i>Placing Replicated Data to Reduce Seek Delays</i> , Department of Computer Science, University of Maryland, UMIACS-TR-91-121, CS-TR-2746, August 1991.
CN	6	BITTON, DINA, <i>Disk Shadowing</i> , Proceedings of the 14 th VLDB Conference, LA, CA 1988.
CN	7	CHAUDHURI, SURAJIT, ET AL., <i>Self-Tuning Technology in Microsoft SQL Server</i> , Data Engineering Journal 22, 2 1999 pp. 20-27.
CN	8	CHUTANI, SAILESH, ET AL., <i>The Episode file system</i> , In Proceedings of the USENIX Winter 1992.
CN	9	COYNE, ROBERT A., ET AL., <i>Storage Systems for National Information Assets</i> , Proc. Supercomputing 92, Minneapolis, Nov. 1992, pp. 626-633.
CN	10	FINLAYSON, ROSS S., ET AL., <i>Log Files: An Extended File Service Exploiting Write-Once Storage</i> Department of Computer Science, Stanford University, Report No. STAN-CS-87-1177, September 1987.
CN	11	GRAY, JIM, ET AL., <i>The Recovery Manager of the System R Database Manager</i> , ACM Computing Surveys, (13)2:223-242 1981.
CN	12	HECHT, MATTHEW S., ET AL. <i>Shadowed Management of Free Disk Pages with a Linked List</i> , ACM Transactions on Database Systems, 8/4, December 1983, pp. 503-514.
CN	13	HOWARD, JOHN, H. ET AL., <i>Scale and Performance in a Distributed File System</i> , Carnegie Mellon University, CMU-ITC-87-068, August 1987.

Examiner Signature

/Cindy Nguyen/

Date Considered

07/20/2006

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0851-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		JUL 11 2005		Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number		10/090,963	
		Filing Date		March 5, 2002	
		First Named Inventor		Dennis E. Chapman	
		Group Art Unit		2161	
		Examiner Name		Nguyen, Cindy	
Sheet	2	of	3	Attorney Docket Number	
				112056-0047	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CN	14	HOWARD, JOHN H., <i>An Overview of the Andrew File System</i> , Carnegie Mellon University, CMU-ITC-88-062 1988.	
CN	15	HOWARD, JOHN, H. ET AL., <i>Scale and Performance in a Distributed File System</i> , ACM Trans. Computer System, 6(1), Feb. 1988 pp. 51-81.	
CN	16	KAZAR, MICHAEL LEON, <i>Synchronization and Caching Issues in the Andrew File System</i> , Carnegie Mellon University, CMU-ITC-88-063.	
CN	17	KAZAR, MICHAEL L., ET AL., <i>Decorum File System Architectural Overview</i> , USENIX Summer Conference, Anaheim, California, 1990.	
CN	18	KEMPER, ALFONS, ET AL., <i>Performance Tuning for SAP R/3</i> , Data Engineering Journal 22, 2 1999 pp. 33-40.	
CN	19	KENT, JACK ET AL., <i>Optimizing Shadow Recovery Algorithms</i> , IEEE Transactions on Software Engineering, 14(2): 155-168, February 1988.	
CN	20	KISTLER, ET AL., <i>Disconnected Operation in the Coda File System</i> , ACM Transactions on Computer Systems, Vol. 10, No. 1, February 1992, pp 3-25.	
CN	21	LORIE, RAYMOND, A. <i>Physical Integrity in a Large Segmented database</i> , ACM Trans. Database Syst., vol. 2, March 1977, pp. 91-104.	
CN	22	OUSTERHOUT, JOHN ET AL., <i>Beating the I/O Bottleneck: A Case for Log-Structured File Systems</i> , Technical Report, Computer Science Division, Electrical Engineering and Computer Sciences, University of California at Berkeley, October 30, 1988.	
CN	23	PATTERSON, D., ET AL., <i>A Case for Redundant Arrays of Inexpensive Disks (RAID)</i> , Technical Report, CSD-87-391, Computer Science Division, Electrical Engineering and Computer Sciences, University of California at Berkeley 1987.	
CN	24	PATTERSON, D., ET AL., <i>A Case for Redundant Arrays of Inexpensive Disks (RAID)</i> , SIGMOD International Conference on Management of Data, Chicago, IL, USA, 1-3 June 1988, SIGMOD RECORD (17)3:109-16 Sept. 1988.	
CN	25	PETERSON, ZACHARY NATHANIEL JOSEPH, <i>Data Placement for Copy-on-Write Using Virtual Contiguity</i> , University of CA, Santa Cruz, Master's Thesis for the Department of Science in Computer Science, September 2002.	

Examiner Signature	/Cindy Nguyen/	Date Considered	07/20/2006
--------------------	----------------	-----------------	------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		JUL 11 2005		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number		10/090,963	
		Filing Date		March 5, 2002	
		First Named Inventor		Dennis E. Chapman	
		Group Art Unit		2161	
		Examiner Name		Nguyen, Cindy	
Sheet	3	of	3	Attorney Docket Number	
				112056-0047	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CN	26	QUINLAN, SEAN, <i>A Cached WORM File System</i> , Software-Practice and Experience, 21(12):1289-1299 1991.	
CN	27	ROSENBLUM, MENDEL, ET AL., <i>The LFS Storage Manager</i> , Computer Science Division, Electrical Engineering And Computer Sciences, Univ. of CA, presented at Summer '90 USENIX Technical Conference, Anaheim, CA June 1990.	
CN	28	ROSENBLUM, MENDEL, ET AL. <i>The Design and Implementation of a Log-Structured File System</i> July 24, 1991 ppl-15.	
CN	29	ROSENBLUM, MENDEL, <i>The Design and Implementation of a Log-Structured File System</i> , 1992 pp. 1-93.	
CN	30	ROSENBLUM, MENDEL, ET AL., <i>The Design and Implementation of a Log-Structured File System</i> , In Proceedings of ACM Transactions on Computer Systems, (10)1:26-52, February 1992.	
CN	31	SCHIEFER, BERNI, ET AL., <i>DB2 Universal Database Performance Tuning</i> , Data Engineering Journal 22, 2 1999 pp. 12-19.	
CN	32	SELTZER, MARGO I., ET AL., <i>Journaling Versus Soft Updates: Asynchronous Meta-Data Protection in File Systems</i> , Proceedings of 200 USENIX Annual Technical Conference, 6/18-23/2000.	
CN	33	SHASHA, DENNIS, <i>Tuning Time Series Queries in Finance: Case Studies and Recommendations</i> , Data Engineering Journal 22, 2 1999 pp 41-47.	
CN	34	SIDEBOTHAM, BOB, <i>Volumes: The Andrew File System Data Structuring Primitive</i> , EEUG Conference Proceedings, Manchester, UK, Autumn 1986.	
CN	35	SUBRAMANIAN, MURALIDHAR, ET AL., <i>Performance Challenges in Object-Relational DBMSs</i> , Data Engineering Journal 22, 2 1999 pp 28-32.	
CN	36	WEIKUM, GERHARD, ET AL., <i>Towards Self-Tuning Memory Management for Data Servers</i> , Data Engineering Journal 22, 2 1999 pp 3-11.	
CN	37	WEST, MICHAEL, ET AL. <i>The ITC Distributed File System: Prototype and Experience</i> , Carnegie-Mellon University, Technical Report CMU-ITC-040, March 1985.	
CN	38	ZAYAS, EDWARD R., <i>AFS-3 Programmer's Reference: Architectural Overview</i> , Transarc Corporation, Pittsburgh, PA, 1.0 edition 1991.	

Examiner Signature	<u>/Cindy Nguyen/</u>	Date Considered	07/20/2006
--------------------	-----------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

+

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

JUL 23 2002
 OIPF
 SCLOSURE
 APPLICANT
 TRADEMARK OFFICE

Complete if Known

Sheet	1	of	1
-------	---	----	---

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
CN	1	Common Internet File System (CIFS) Version: CIFS-Spec 0.9, Storage Networking Industry Association (SNIA), Draft SNIA CIFS Documentation Work Group Work-in-Progress, Revision Date: March 26, 2001.	

RECEIVED

JUL 29 2002

Technology Center 210

RECEIVED

JUL 29 2002

Technology Center 2100

/Cindy Nguyen/

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

+